

**REMARKS**

Reconsideration of this application is respectfully requested in view of the foregoing amendment and the following remarks.

Claims 5-31 are currently pending. No new matter has been added.

The undersigned representative thanks the Examiner for the personal interview on January 7, 2005.

**Drawings**

Formal drawings will be promptly submitted once a Notice of Allowance is issued in the application.

**Rejection of claims 22-24 under 35 U.S.C. 112, first and second paragraphs.**

The Examiner rejected claims 22-24 because of the phrase “stationary radius.” Per the Examiner’s suggestion, claims 22-24 have been amended to recite a “non-rotary radius” due to the non-rotary nature of the nose, as shown in at least Figure 3. The specification has also been amended to clarify this point. Accordingly, it is respectfully requested that the rejections under 35 U.S.C. 112 be withdrawn.

**Rejection of claims 5, 6, 8, 9, 15, 20, and 21 under 35 U.S.C. 102(b) as being anticipated by Ermert et al. (Publication from Plastics Engineering titled “R U Reinforcing plastics with robots)”**

Regarding claim 5, the Examiner alleged that Ermert et al. teach a computer that “includes programmed data respecting the shape of the work piece and the proposed path of the tape” as evidence by page 4, under the heading “Programming and tool changing” and page 6, under the glossary definitions for control, servos, and programming method. It is respectfully submitted that Ermert et al. merely teach a computer having programmed data respecting a proposed path of the tape application (by “teach in” or “lead-through” method, or by “follow up” or “walk-through” method as described in the above-cited sections in Ermert et al.). Thus, Ermert et al. do not teach programmed data respecting *the shape of the work piece* as well, as claimed. Further, it is not inherent in Ermert et al. that such programmed data includes data respecting the shape of the work piece. MPEP 2131 states that for a prior-art rejection of anticipation under 35 U.S.C. 102, “[a] claim is *anticipated* only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” (Emphasis added). (Quoting Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). Because Ermert et al. fail to disclose at least a computer that includes programmed data respecting *the shape of the work piece* as claimed, it is respectfully submitted that claim 5 and its dependent claims 6-7 are allowable over Ermert et al. and other references of record.

Furthermore, claim 6 has been amended to include further structural components for the claimed activator applicator. Support for the amendment can be found at least on page 12 of the specification. It is respectfully submitted that the references of record do not disclose the claimed structure for the activator applicator. As indicated by the Examiner in the personal

interview dated January 7, 2005, the additional structural components for the activator applicator appear to overcome at least the references of record.

Regarding claim 8, it has been amended to clearly recite a two-sided adhesive tape in the claimed invention. Figures 5 and 6 of Ermert et al. actually teach away from a roller storing two-sided adhesive tape. As shown in those two figures, if a two-sided adhesive tape is used, one side of the tape would have been stuck to the foil, which would not have allowed the foil to be separated from the tape and taken up by the foil takeup roll (shown in Figure 5). Indeed, the systems disclosed in Ermert et al. are conceived for application of fiber reinforced tape, and there is no mention of *adhesive tape* as claimed. As understood in the art, the term “pre-preg tapes” in Ermert et al. refer to fiber tapes used to apply to a previously coated surface and not adhesive tape as claimed.

**Rejection of claims 7, 10-14, 16-19, and 22-24 under 35 U.S.C. 103(a) as being unpatentable by Ermert et al. in view of various other references**

These claims are allowable over the references of record for the same reasons set forth above for the allowance of claims 5 and 8.

Furthermore, claim 7 has been amended to recite a cutting mechanism that is integrated within a nose of the tape applicator head. Ermert et al. does not teach such arrangement for its cutting mechanism (see Figure 6 in Ermert et al.). Further, the other references of records cannot be combined with Ermert et al. to make such arrangement obvious because it is not possible to structurally alter Ermert et al. in order to incorporate the requisite structures in the other references of record. Hence, claim 7 is neither disclosed nor made obvious by the references of

record. Indeed, as indicated by the Examiner in the personal interview dated January 7, 2005, the additional arrangements for the cutting mechanism appear to overcome at least the references of record.

### **New Claims**

Claims 25 and 26 have been added to recite a knife blade that is retracted from the nose and/or its non-rotary smooth radius when the cutting mechanism is not in operation. It is respectfully submitted that the references of record neither disclose nor make obvious such structural arrangement. Indeed, as indicated by the Examiner in the personal interview dated January 7, 2005, a further description of the cutting means, i.e., the knife blade, appears to overcome at least the references of record.

Claim 27 has been added to recite that the tape applicator head further comprises a tensioning mechanism that is located adjacent to the braking mechanism to maintain a uniform tension on the tape. It is respectfully submitted that the references of record neither disclose nor make obvious such structural arrangement.

Claim 28 has been added to recite a sensor for detecting an amount of the tape remaining on the roller, which is neither disclosed nor made obvious by the references of record.

Claims 29 and 30 have been added to recite a linear bearing for providing reciprocal motion of the nose in the direction normal to the work piece, which is neither disclosed nor made obvious by the references of record.

Claim 31 has been added to recite side guides connecting to the projections located on either side of the nose, which is neither disclosed nor made obvious by the references of record.

**Conclusion**

For at least all of the above reasons, it is respectfully submitted that the present invention is neither disclosed nor suggested by the references of record, and the claims now pending patentably distinguish the present invention from the references of record. Accordingly, reconsideration and withdrawal of the outstanding rejections and an issuance of a Notice of Allowance are earnestly solicited upon the filing of the RCE.

Respectfully submitted,

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